

(1 Data Item)

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (D701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY: TDP _____ TM _____ OTHER _____			
D. SYSTEM/ITEM F100-PW-100/-200/-220 Engines			E. CONTRACT/PR NO.		F. CONTRACTOR		
1. DATA ITEM NO.  A001	2. TITLE OF DATA ITEM  Contractor's Configuration Management Plan			3. SUBTITLE  Nsn-2840-00-337-4374 Noun: Combustion Chamber Guide Pre-Production Plan			
4. AUTHORITY (Data Acquisition Document No.)  DI-CMAN-80858 / T			5. CONTRACT REFERENCE		6. REQUIRING OFFICE  DSCR-JLTB		
7. DD 250 REQ  SD	9. DIST STATEMENT REQUIRED  A	10. FREQUENCY  1Time	12. DATE OF FIRST SUBMISSION  30DAC		14. DISTRIBUTION  a. ADDRESSEE  DCM - QAR Vendor DCM  DSCR-JLP PCO Richmond, VA		
8. APP CODE  N/A		11. AS OF DATE  N/A	13. DATE OF SUBSEQUENT SUBMISSION  N/A				
16. REMARKS  Nsn-2840-00-337-4374 , Part# 4025365 (77445).  Block 4. Tailored:  The Contract Awardee shall provide a plan for approval that ensures all drawing and specification requirements are complied with prior to initial manufacture. The Plan shall include the "equipment and facilities" utilized to verify all drawing(s), specifications, and process requirements. As a minimum, the Plan shall address the following criteria:  (a). A list of all drawing dimensions, surface texture, etc..., to be inspected and the equipment to be used for verification of each dimension, surface texture, etc... An actual drawing(s) shall be submitted with the Plan that correlates the dimensions on the drawing(s) to those identified on the list.  (b). A plan to verify that all non-destructive inspections are met.  (c). A plan to verify that all visual inspection requirements are met.  (d). A plan that identifies and monitors critical characteristic data and processes.  (e). A plan to verify material properties which shall include material properties, metallurgical properties, and chemical compositions.  (f). A plan to ensure that all manufacturing processes are performed by the Original Equipment Manufacturer(OEM), Pratt and Whitney, certified vendors.  (g). A plan to ensure that the forging / casting source is OEM approved for the specific forging / casting requirement, as applicable.  (h). The Plan shall identify all external sources for applicable material and process requirements.  (i). The Plan shall identify GFE, GFM, and Tooling requirements if applicable.  (j). The Plan shall identify all aspects of Quality Assurance such as policies, organization, planning, procedures control, responsibilities, and interfaces including calibration, inspection and testing related criteria.  Additional guidelines for this Plan are contained in LPF-QAR-003.  Block 7. The "Pre-Production Plan" shall be submitted to DSCR for evaluation and approval. A copy shall be submitted to the local DCM Office.  Block 14. Distribution as follows: A copy of the contract and drawing(s) shall be provided with the Plan to;  1. DCM - QAR , Vendor DCM Office  2. Defense Supply Center Richmond (DSCR) Attn: DSCR-JLP 8000 Jefferson Davis Highway Richmond, VA 23297-5877					b. COPIES  Draft  Final Reg Repro		
					15. TOTAL		
G. PREPARED BY  Joseph Kesyk		H. DATE  01-21-2003		I. APPROVED BY  Joseph Kesyk			
				J. DATE  01-21-2003			

<p><b>17. PRICE GROUP</b></p>
<p><b>18. ESTIMATED TOTAL PRICE</b></p>

# CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved  
OMB No. 0704-0188

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A. CONTRACT LINE ITEM NO. B. EXHIBIT C. CATEGORY:  
TDP \_\_\_\_\_ TM \_\_\_\_\_ OTHER \_\_\_\_\_

D. SYSTEM/ITEM F100-PW-100/-200/-220 Engines E. CONTRACT/PR NO. F. CONTRACTOR

1. DATA ITEM NO. A002 2. TITLE OF DATA ITEM Reliability Test Reports 3. SUBTITLE Nsn-2840-00-337-4374  
Noun: Combustion Chamber Guide  
Production Lot Test / Inspection Report

4. AUTHORITY (Data Acquisition Document No.) DI-TMSS-81586 / T 5. CONTRACT REFERENCE 6. REQUIRING OFFICE DSCR-JLTB

7. DD 250 REQ SS 8. DIST STATEMENT REQUIRED A 9. FREQUENCY ASGEN 10. DATE OF FIRST SUBMISSION 30DATC 11. AS OF DATE See Block 16 12. DATE OF SUBSEQUENT SUBMISSION N/A 13. DISTRIBUTION a. ADDRESSEE b. COPIES Draft Final Reg Repro

16. REMARKS DCM - QAR 0 1 1  
Vendor DCM

Block 4. Tailored:

Use / Relationship  
The Vendor shall provide a Final Test Report on Production Lot Sample Testing (PLT) and/or Inspection results for 02-percent to 100-percent of drawing rqmt's on the first production lot and results for 03-percent of all critical characteristics on each production lot manufactured.

Requirements  
The Report shall address DID para-3 sub-headers a thru i as well as para-3.2 and para-3.3, delete Summary Report rqmt's para-3.1 and 3.1.1.

The Report Analysis shall address the following as a minimum:

- Verify all dimensional and surface texture rqmt's of dwg 4025365 & spec's.
- Verify conformance of QAD 4025365 to include FPI per FPM Code 1 and FPS-M, as well as Visual Inspection per VIS-46 and VIS-Master.
- Verify critical process is per drawing note 2 requirements.
- Verify conformance of Pratt & Whitney approved sources for special processes and material is per PWA1042.
- Verify test equipment utilized for each inspection / test and provide evidence of any applicable calibration record.

Quantity shall be selected by the DCM QAR for Awardee testing.

Quantity may be selected by the DCM QAR for Sub-Vendor lab testing. Lab testing shall be coordinated with Sherry Labs, Muncie Indiana. Point of contact is 765-747-0228, and Fax 765-747-9000. Same requirements apply.

Destructive testing shall be approved by the DSCR PCO only.

Block 7. The Report shall contain the results from the Awardee testing and/or the results from the Sub-Vendor Lab. Vendor is only authorized to ship contract quantity upon written authorization from the DCM-QAR.

Block 11. Report is due no later than 200-days after contract award.

Block 14. Distribution as follows: A copy of the contract and drawing(s) shall be provided with the Reliability Test Report to:

- DCM - QAR Vendor Office
- Defense Supply Center Richmond(DSCR)  
Attn: DSCR-JLP  
8000 Jefferson Davis Highway  
Richmond, VA 23297-5877

15. TOTAL 0 1 2

G. PREPARED BY Joseph Lesyk H. DATE 01-21-2003 I. APPROVED BY Joseph Lesyk J. DATE 01-21-2003

17. PRICE GROUP

18. ESTIMATED  
TOTAL PRICE

**INSTRUCTIONS FOR COMPLETING DD FORM 1423**  
(See DoD 5010.12-M for detailed instructions.)

**FOR GOVERNMENT PERSONNEL**

Item A. Self-explanatory.

Item B. Self-explanatory.

Item C. Mark (X) appropriate category: TDP - Technical Data Package; TM - Technical Manual; Other - other category of data, such as "Provisioning," "Configuration Management," etc.

Item D. Enter name of system/item being acquired that data will support.

Item E. Self-explanatory (to be filled in after contract award).

Item F. Self-explanatory (to be filled in after contract award).

Item G. Signature of preparer of CDRL.

Item H. Date CDRL was prepared.

Item I. Signature of CDRL approval authority.

Item J. Date CDRL was approved.

Item 1. See DoD FAR Supplement Subpart 4.71 for proper numbering.

Item 2. Enter title as it appears on data acquisition document cited in Item 4.

Item 3. Enter subtitle of data item for further definition of data item (optional entry).

Item 4. Enter Data Item Description (DID) number, military specification number, or military standard number listed in DoD 5010.12-L (AMSDL), or one-time DID number, that defines data content and format requirements.

Item 5. Enter reference to tasking in contract that generates requirement for the data item (e.g., Statement of Work paragraph number).

Item 6. Enter technical office responsible for ensuring adequacy of the data item.

Item 7. Specify requirement for inspection/acceptance of the data item by the Government.

Item 8. Specify requirement for approval of a draft before preparation of the final data item.

Item 9. For technical data, specify requirement for contractor to mark the appropriate distribution statement on the data (ref. DoDD 5230.24).

Item 10. Specify number of times data items are to be delivered.

Item 11. Specify as-of date of data item, when applicable.

Item 12. Specify when first submittal is required.

Item 13. Specify when subsequent submittals are required, when applicable.

Item 14. Enter addressees and number of draft/final copies to be delivered to each addressee. Explain reproducible copies in Item 16.

Item 15. Enter total number of draft/final copies to be delivered.

Item 16. Use for additional/clarifying information for Items 1 through 15. Examples are: Tailoring of documents cited in Item 4; Clarification of submittal dates in Items 12 and 13; Explanation of reproducible copies in Item 14.; Desired medium for delivery of the data item.

**FOR THE CONTRACTOR**

Item 17. Specify appropriate price group from one of the following groups of effort in developing estimated prices for each data item listed on the DD Form 1423.

a. Group I. Definition - Data which is not otherwise essential to the contractor's performance of the primary contracted effort (production, development, testing, and administration) but which is required by DD Form 1423.

Estimated Price - Costs to be included under Group I are those applicable to preparing and assembling the data item in conformance with Government requirements, and the administrative and other expenses related to reproducing and delivering such data items to the Government.

b. Group II. Definition - Data which is essential to the performance of the primary contracted effort but the contractor is required to perform additional work to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, or quality of the data item.

Estimated Price - Costs to be included under Group II are those incurred over and above the cost of the essential data item without conforming to Government requirements, and the administrative and other expenses related to reproducing and delivering such data item to the Government.

c. Group III. Definition - Data which the contractor must develop for his internal use in performance of the primary contracted effort and does not require any substantial change to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, and quality of the data item.

Estimated Price - Costs to be included under Group III are the administrative and other expenses related to reproducing and delivering such data item to the Government.

d. Group IV. Definition - Data which is developed by the contractor as part of his normal operating procedures and his effort in supplying these data to the Government is minimal.

Estimated Price - Group IV items should normally be shown on the DD Form 1423 at no cost.

Item 18. For each data item, enter an amount equal to that portion of the total price which is estimated to be attributable to the production or development for the Government of that item of data. These estimated data prices shall be developed only from those costs which will be incurred as a direct result of the requirement to supply the data, over and above those costs which would otherwise be incurred in performance of the contract if no data were required. The estimated data prices shall not include any amount for rights in data. The Government's right to use the data shall be governed by the pertinent provisions of the contract.

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FOR  
FIRST ARTICLE TEST PLANS AND REPORTS

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1. This document provides guidelines for the preparation of first article test plans/test reports for F100 engine parts where referenced within the first article data of a contract.
2. FIRST ARTICLE QUANTITY. The quantity of first articles shall be per the contract. The quantity of articles allowed for destructive testing, in accordance with the contract, shall be tested per the first article procedure in its entirety, to include the destructive testing. The remaining articles shall only be tested per the nondestructive portions of the procedure.
3. TESTING REQUIREMENTS.
  - 3.1. Testing shall consist of, but shall not be limited to, the verification of the following.
    - 3.1.1. Dimensional conformance including finish requirements.
    - 3.1.2. Conformance to non-destructive inspection requirements (FPI, Ultra-sonic, Eddy Current, X-ray, visual)
    - 3.1.3. Conformance of material properties to include mechanical, metallurgical and chemical.
    - 3.1.4. Conformance to other required processes, specifications, and standards listed on the drawing including sub-tier specifications and standards, special requirements as described in the engineering instructions (EI), quality plans, etc.
  - 3.2. First articles shall be serialized. Serial Numbers are to be identified prior to commencement of testing unless otherwise specified.
  - 3.3. Dimensional Inspection.
    - 3.3.1. All dimensions, as listed on the assembly drawing and detail drawings, to include drawing notes, shall be measured where possible on all first articles 100% (no sampling allowed).
    - 3.3.2. A tabular format shall be used with drawing dimension, tolerance, measurement, and instrument/gage/tooling/serial number used.
    - 3.3.3. All tooling and gaging used for inspection and acceptance/rejection of first articles shall have calibrations from a laboratory traceable to NIST and in accordance with ISO 10012-1 (formerly MIL-STD-45662), listed in a (tooling & gaging table) table, table shall include nomenclature, serial number, calibration frequency, next calibration date, range, least increment, and accuracy. Listing shall also include alignment tools and constraint fixtures.
    - 3.3.4. Inspection results shall be presented in a table showing the feature measured, dimension and tolerance, actual reading and gage serial number used.
  - 3.4. Nondestructive Inspections (NDI), including Fluorescent Penetrant Inspections (FPI), Ultrasonic Testing (UT), Eddy Current (EC), Radiographic Testing (x-ray), and visual inspections, shall meet the following:

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- 3.4.1. All first articles shall receive 100% of the inspections identified on the QAD. Sampling shall not be allowed.
- 3.4.2. NDI shall be per the applicable specification(s).
- 3.4.3. Sources used shall be Pratt&Whitney approved per the OC-ALC/LPFR letter granting source approval to the contractor.
- 3.4.4. NDI results shall be presented in a table showing the feature inspected, acceptance/rejection criteria used, results and gage/master serial number used. In cases where photographic standards within a VIS specification are applied to an NDI, the inspection report shall include a copy.
- 3.4.5. Inspection Masters/Transfer Masters shall have current calibrations. A copy of the calibration(s) shall be included into the report.
- 3.4.6. Level III or Level II inspectors, as applicable, shall be required. A copy of the inspector's certification(s) shall be included into the report.
- 3.5. Visual Inspections shall include:
- 3.5.1. Specific visual inspections per a Pratt&Whitney Visual Inspection Standard (VIS) document shall be called out of the applicable VIS and cited as specific inspections.
- 3.5.2. Visual inspection results shall be presented in a table showing the feature inspected, acceptance/rejection criteria used, results, and gage/master serial number used (as applicable).
- 3.5.3. In cases where photographic standards within the VIS are used, the inspection report shall include a copy.
- 3.6. Material properties testing shall include mechanical properties, metallurgical properties, and chemical composition tests, as applicable, per the material specifications and the following:
- 3.6.1. Composition, heat treat condition, and other characteristics/properties, as listed in the technical requirements section, acceptance section, and/or quality sections of the specification(s) so as to verify that the materials and processes are sound, clean, and free of imperfections detrimental to the performance of the part or assemblies.
- 3.6.2. In some cases a material suppliers certification will not be sufficient and the Contractor shall have redundant testing performed.
- 3.6.3. Metallurgical microanalysis, as applicable, for raw materials, weldments, brazements, and coatings shall be conducted. Results shall include the complete laboratory report including photomicrographs.
- 3.6.4. Mechanical testing, as applicable, per manufacturing specifications and the drawing(s).

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3.6.5. In cases where the applicable specifications require test reports, these shall accompany the First Article Test Report (FATR).

4. SUBMITTAL.

4.1. The First Article Test Plan (FATP) shall be delivered to the Contracting Officer in accordance with the schedule as listed in the contract, or Form DD1423. The FATP shall provide a detailed description of specific testing instructions to be used. Generalized instructions will not be acceptable.

4.2. The First Article Test Report (FATR) shall be delivered to the Contracting Officer in accordance with the schedule as listed in the contract, or Form DD1423. All laboratory test results, including those resultant from testing conducted at the contractor's facility and including sub-vendor testing, shall be provided with the FATR in their complete form as provided by the testing laboratory(ies).

5. DISPOSITION OF PARTS.

5.1. When required by the contract, the remnants from destructive testing shall be delivered with the First Article Test Report.

5.2. When required by the contract and following the completion of non-destructive testing, one article shall be delivered to the Contracting Officer and packaged in accordance with contract requirements. Marking on the package shall be **UNSERVICEABLE - Condition Code "R"**. Deliver this part with the First Article Test Report. The other(s) shall be handled in accordance with the contract.

6. GENERAL REQUIREMENTS.

6.1. All First Articles and all Production Articles shall be fabricated from material whose metallurgical state is in compliance with the drawing requirements, as well as all sub-tier specifications and standards referenced therein.

6.2. All First Articles and all Production Articles shall be new manufactured under this contract. No items manufactured under previous contracts shall be delivered without approval.

6.3. The subcontractors previously identified by the contractor as sources to be employed, to include laboratory testing, shall be the only sources used. If the contractor wishes to employ a subcontractor other than previously identified, they shall substantiate that the new source is OEM approved for the specific testing required. A change in the address of a source shall be construed as a change of source. Employment of alternate sources shall only be authorized by OC-ALC/LPFR.

6.4. Engineering Instructions shall take precedence over all other technical instructions.

----- **END OF DOCUMENT** -----

## DATA ITEM DESCRIPTION

**Title:** Contractor's Configuration Management Plan

**Number:** DI-CMAN-80858B

**Approval Date:** 20000930

**AMSC Number:** D7392

**Limitation:** N/A

**DTIC Applicable:** No

**GIDEP Applicable:** No

**Office of Primary Responsibility:** D/DUSD(AT&L)SE

**Applicable Forms:** N/A

**Use, Relationships:** The Contractor's Configuration Management (CM) Plan describes the contractor's configuration management program, how it is organized, how it will be conducted, and the methods procedures and controls effective configuration identification, change control, status accounting, and audits of the total configuration, including hardware, software and firmware. The principle use is to provide the government a basis for review, evaluation and monitoring of the CM program and its proposed components.

This Data Item Description (DID) contains the content and preparation instructions for the data product resulting from the work task specified in the contract.

Data Item Description submittal in Extensible Markup Language (XML) is acceptable. An XML Document Type Definition (DTD), associated XML document template, and other information is available from <http://www.geia.org/836/>

This DID supersedes DI-CMAN-80858A.

### Requirements:

1. Reference documents. The applicable issue of any documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.
2. Format and content. The Contractor's CM Plan shall be prepared in contractor format. The Contractor's CM Plan content shall be in accordance with the contractor's processes and procedures, or as specified in the contract. The following references may be useful in defining content: ANSI/EIA-649-1998, National Consensus Standard for Configuration Management (paragraphs 5.2.5 and 5.3.3); ISO 10007, Quality Management-Guidelines for Configuration Management; and MIL-HDBK-61, Configuration Management Guidance (Section 2 and Appendix A).

END OF DI-CMAN-80858B

## DATA ITEM DESCRIPTION

**Title: Reliability Test Reports**

Number: DI-TMSS-81586  
AMSC Number: G7401  
DTIC Applicable: N/A

Approval Date: 5 October 2000  
Limitation: N/A  
GIDEP Applicable: No

Office of Primary Responsibility: G/Y243  
Applicable Forms: N/A

### **Use/relationship:**

These reports are formal records of the results of the contractor's reliability tests and will be used by the procuring activity to evaluate the degree to which the reliability requirements have been met. The reports shall be periodic test summary reports (see 3.1 below) or Final Test Reports (see 3.2 below) as reflected in the contract. These reports may be used to report the results of reliability tests or tests from which reliability evaluation is a by-product.

### **Requirements:**

1. Reference documents: None
2. Format: Contractor format is authorized.
3. Content: The Reliability Test Reports shall contain the results of each test or other action taken to demonstrate the level of reliability achieved in the contract end item and its constituent elements required by the contract. The reports shall specifically contain the following:
  - a. Test article identification and full description of test specimens utilized, including any deviations from the configuration specified in the applicable test plan.
  - b. Date and location of test or evaluation.
  - c. Statement of test/evaluation objectives, including type, unit of measure, and quantitative goals/requirements to be demonstrated.
  - d. Statistical confidence calculations, if appropriate.
  - e. Discussion of methods and conditions of the demonstration, including test plan used, environmental levels, test profile, methods of evaluating the data obtained and comparison of the conditions with those anticipated in ultimate deployment and use of contract item.
  - f. Results obtained, including specific identification and discussion of objectives demonstrated satisfactorily and those not demonstrated satisfactorily.
  - g. Corrective action anticipated, if applicable.
  - h. Contractor's conclusion and recommendations based on evaluation of the test/demonstration results.
  - i. Requirements for and results of retest in cases where a reject decision were reached.

3.1 Summary reports. Periodic Test Summary Reports shall consist of summaries of the progress or status of various reliability tests underway during the reporting period. All periodic summaries shall include the following:



- a. Type and number of units on test and the type of test.
- b. Total elapsed unit hours of test time during the period covered in the report.
- c. Total number of equipment failures for each operational mode specified in the duty cycle.
- d. Description of each failure problem area, related failure analysis, and corrective action.
- e. Test conditions and analysis of any variation from specified conditions.
- f. Present accept/reject status.
- g. A chart showing a plot of the observed Mean Time Between Failures (MTBF) from start of test through the report period and the predicted value of MTBF for comparison.
- h. The status and/or disposition of each corrective action

3.1.1 It is intended that the text of these reports be limited to brief, concise statements of significant progress and present status.

3.2 Final report. The Final Reliability Test Report shall include the information required by 3.1, items a. through h., and the results of the completed reliability tests or other action performed or evaluated to demonstrate reliability. The Final Report can be divided into two parts: Part 1, covering Reliability Qualification Testing, and Part 2, covering Production Reliability Acceptance Tests. Test reports shall include a failure summary and analysis and a general reliability analysis.

3.3 It is intended that the text of these reports be limited to brief and concise statements.